



# SIVIM Alpine – Database of high-mountain grasslands in the Iberian Peninsula

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## Abstract

SIVIM Alpine (GIVD ID: EU-00-034) is a thematic database focused on vegetation plots from alpine grasslands of the Iberian Peninsula. The main aim of the database is to centralize historical and new vegetation plots of grassland-like communities above the treeline from Spanish mountains, the Pyrenees (including France and Andorra) and Serra da Estrela (Portugal). The database was registered in GIVD in December 2020, and it is currently available in EVA under semi-restricted regime. SIVIM Alpine includes both digitized relevés from the literature and unpublished data. Most of digitized relevés overlap with SIVIM (GIVD ID EU-00-004) but the header data and the geographical coordinates of SIVIM Alpine have been improved when possible. The database is routinely updated with new surveys conducted with GPS and detailed ecological data. Nowadays, SIVIM Alpine contains 6,420 vegetation plots corresponding to all phytosociological alliances described in the Iberian Peninsula for high-mountain grassland vegetation, 85% of them also classified at the association level. Plot size is available for 80% of the relevés. Plant taxonomy keeps the names provided by the original authors of the relevés, with an additional correspondence to Euro+Med and The Plant List, when possible. The database is continuously updated by revisiting the original sources. Different versions of the database have been used to vegetation analysis at national at continental scales.

**Abbreviations:** EVA = European Vegetation Archive; GIVD = Global Index of Vegetation-Plot Databases; SIVIM = Iberian and Macaronesian Vegetation Information System.

## Keywords

Alpine vegetation, *Festucetea indigestae*, *Festuco-Ononidetea*, Iberian Peninsula, *Kobresio-Seslerietea*, Mountains, *Nardetea*, Portugal, Pyrenees, relevé, Spain, vegetation-plot database

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## GIVD Fact Sheet

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|--|--|-----------------------------|--|--|--|
| <b>GIVD Database ID:</b> EU-00-034   | <b>Last update:</b> 2020-12-18                                       |                             |  |  |  |
| <b>SIVIM Alpine</b>  | <b>Web address:</b>  |                             |  |  |  |
| <b>Database manager(s):</b> Borja Jiménez-Alfaro (jimenezalfaro.borja@gmail.com); Xavier Font (xfont@ub.edu )  |  |                             |  |  |  |
| <b>Owner:</b> Borja Jiménez-Alfaro   |  |                             |  |  |  |
| <b>Scope:</b> SIVIM Alpine focuses on high-mountain (alpine) grassland-like communities of the Iberian Peninsula. All vegetation plots recording the co-occurrence of vascular plants (as a minimum) in areas typically between 1 and 200 m <sup>2</sup> are included. |  |                             |  |  |  |
| <b>Abstract:</b>   |  |                             |  |  |  |
| <b>Availability:</b> according to a specific agreement   | <b>Online upload:</b> no   | <b>Online search:</b> no    |  |  |  |
| <b>Database format(s):</b> TURBOVEG, MS Access, Excel  | <b>Export format(s):</b> TURBOVEG, MS Access, Excel, CSV file        |                             |  |  |  |
| <b>Plot type(s):</b> normal plots, time series   | <b>Plot-size range:</b> 1 to 200                                     |                             |  |  |  |
| <b>Non-overlapping plots:</b><br>6420  | <b>Estimate of existing plots:</b><br>7000                           | <b>Completeness:</b><br>92% | <b>Status:</b><br>completed and continuing |  |  |
| <b>Total no. of plot observations:</b><br>6420   | <b>Number of sources (biblioreferences, data collectors):</b><br>100 | <b>Valid taxa:</b><br>2112  |  |  |  |
| <b>Countries (%):</b> AD: 2; FR: 12; PT: 1; ES: 78   |  |                             |  |  |  |
| <b>Formations:</b> Non Forest: 3% = Terrestrial: 3% (Arctic-alpin: 1%; Non arctic-alpin: 2% [Natural: 1%; Semi-natural: 0%])   |  |                             |  |  |  |
| <b>Guilds:</b> all vascular plants: 100%; bryophytes (terricolous or aquatic): 5%; lichens (terricolous or aquatic): 5%  |  |                             |  |  |  |
| <b>Environmental data (%):</b> altitude: 96; slope aspect: 69; slope inclination: 63; microrelief: 0; surface cover other than plants (open soil, litter, bare rock etc.): 50; other soil attributes: 2; soil pH: 2; land use categories: 2; soil depth: 2             |  |                             |  |  |  |
| <b>Performance measure(s):</b> presence/absence only: 0%; cover: 100%; number of individuals: 0%; measurements like diameter or height of trees: 0%; biomass: 0%; other: 0%  |  |                             |  |  |  |
| <b>Geographic localisation:</b> GPS coordinates (precision 25 m or less): 2%; point coordinates less precise than GPS, up to 1 km: 48%; small grid (not coarser than 10 km): 43%; political units or only on a coarser scale ( above 10 km): 7%                        |  |                             |  |  |  |
| <b>Sampling periods:</b> before 1920: 0%; 1920-1929: 0%; 1930-1939: 0%; 1940-1949: 6%; 1950-1959: 2%; 1960-1969: 3%; 1970-1979: 9%; 1980-1989: 19%; 1990-1999: 24%; 2000-2009: 18%; 2010-2019: 14%; unknown: 5%  |  |                             |  |  |  |
| <i>Information as of 2020-12-18 further details and future updates available from <a href="http://www.givd.info&gt;ID/EU-00-034">http://www.givd.info&gt;ID/EU-00-034</a></i>  |  |                             |  |  |  |

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